

Appendix, page A32

68. $x = \frac{\pi}{4}, \frac{3\pi}{4}, \frac{5\pi}{4}, \frac{7\pi}{4}$

70. $x = \frac{\pi}{2}, \frac{3\pi}{2}$

Chapter 1 Review, page 73

6. Domain: $[-2, 2]$ Range: $[0, 4]$

18. $f(x) = \begin{cases} -2x - 2, & -2 \leq x \leq -1 \\ \sqrt{1 - x^2}, & -1 \leq x \leq 1. \end{cases}$

24. $f^{-1}(x) = \frac{1 - x}{2x - 1}$.

26. a) $x = \ln 5$ b) $x = e^2$ c) $x = \ln(\ln 2)$

Limits at infinity, horizontal asymptotes, page 140

44. horizontal asymptote: $y = -1$ vertical asymptotes: $x = -1, x = 0, x = 1$

Chapter 2 Review, page 167

4. 0 6. $-\infty$ 10. -1 12. $\frac{-5}{54}$ 16. $\frac{1}{3}$ 18. 0

Product and Quotient Rule, page 189

12. $f'(z) = 1 - ze^z - 2e^{2z}$

32. $y = e$

Derivatives of Trig Functions, page 197

8. $f'(t) = -\frac{\csc^2 t + \cot t}{e^t}$

40. $\frac{2}{3}$